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IN THE UNITED STATES PATENT AND  
TRADEMARK OFFICE  
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In Re the Application of:

Edward L. Squires, Patrick M. McCue and George E. Seidel

For: Equine System for Non-Surgical Artificial Insemination

Serial Number: (original US) 60/094,720 (new) \_\_\_\_\_  
(original US) 60/113,143  
(PCT) PCT/US99/17165

Filed: (original US) 30 July 1998 (new) \_\_\_\_\_  
(original US) 18 December 1998  
(PCT) 29 July 1999

Assignee: Colorado State University through its agent Colorado State University  
Research Foundation

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**DECLARATION FOR PATENT APPLICATION**

This Declaration is made by Edward L. Squires, Patrick M. McCue and George E. Seidel.

I, Edward L. Squires, hereby declare:

- I am a citizen of the United States of America and that my residence and mailing address is 5536 North County Road 3, Fort Collins, Colorado 80524.

I, Patrick M. McCue, hereby declare:

- I am a citizen of the United States of America and that my residence and mailing address 1200 Cliffrose Court, Fort Collins, Colorado, 80525.

I, George E. Seidel, hereby declare:

- I am a citizen of the United States of America and that my residence and mailing address 3101 Arrowhead Road, Fort Collins, Colorado, 80535.

We, Edward L. Squires, Patrick M. McCue and George E. Seidel, each hereby declare:

We believe that the named inventors:

- Edward L. Squires, a citizen of the United States of America and whose residence and mailing address is 5536 North County Road 3, Fort Collins, Colorado 80524;
- Patrick M. McCue, a citizen of the United States of America and whose residence and mailing address is 1200 Cliffrose Court, Fort Collins, Colorado, 80525;
- George E. Seidel, a citizen of the United States of America and whose residence and mailing address is 3101 Arrowhead Road, Fort Collins, Colorado, 80535;

are the original, first, and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled an "Equine System for Non-Surgical Artificial Insemination" and:

- as originally entitled "System for Low Dose Insemination of Equines" the specification of which was filed as United States Application Number 60/094,720 filed 30 July 1998;
- as originally entitled "'Equine Insemination System" the specification of which was filed as United States Application Number 60/113,143 filed 18 December 1998;
- as originally entitled "Equine System for Non-Surgical Artificial Insemination" PCT Application Number PCT/US99/17165 the specification of which was filed on 29 July 1999 and designating the United States of America, this PCT Application being filed while the Original US Application was pending;

of which we hereby claim the benefit of and priority pursuant to 35 U.S.C. §§ 119, 120, or 365.

We hereby declare that the above specifications are intended to include disclosure or claims directed to, individually or in combination: embodiments of the invention which may encompass a device, apparatus, method, process, or business method; embodiments of the invention which may encompass permutations or combinations of any aspects of the invention; any aspect of the invention conceived or developed as separate inventions; and any aspect of the invention independent of any initial context considered as preferred embodiments. We also authorize and support this application for patent protection in the United States, and for similar protection in foreign countries, each to be sought to the extent or breadth any owner desires or deems appropriate.

We hereby state that we have reviewed and understand the contents of the specification entitled

"Equine System for Non-Surgical Artificial Insemination", including any claims.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

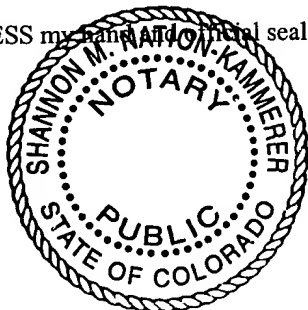
Date: 1/29/01

Edward L. Squires  
Edward L. Squires

UNITED STATES OF AMERICA )  
STATE OF COLORADO )ss.  
COUNTY OF LARIMER )

SUBSCRIBED AND SWORN to before me in the County of Larimer, State of Colorado, United States of America, by Edward L. Squires as Inventor, this 29 day of January, 2001.

WITNESS my hand and official seal pursuant to the authority vested in me as a Notary Public by the State of Colorado.



Shannon M. Nation-Kammerer  
Notary Public  
My Commission Expires: 7-15-2003

Date: 1/29/01  
My Commission Expires 07/15/2003

Patrick M. McCue  
Patrick M. McCue

UNITED STATES OF AMERICA )  
STATE OF COLORADO )ss.  
COUNTY OF LARIMER )

SUBSCRIBED AND SWORN to before me in the County of Larimer, State of Colorado, United States of America, by Patrick M. McCue as Inventor, this 29 day of January, 2001.

WITNESS my hand and official seal pursuant to the authority vested in me as a Notary Public by the State of Colorado.



Shannon M. Nation-Kammerer  
Notary Public  
My Commission Expires: 7-15-2003

My Commission Expires 07/15/2003

Date:

1/29/01

George E. Seidel

*George E. Seidel*

UNITED STATES OF AMERICA )  
STATE OF COLORADO )ss.  
COUNTY OF LARIMER )

SUBSCRIBED AND SWORN to before me in the County of Larimer, State of Colorado, United States of America, by George E. Seidel as Inventor, this 29 day of January, 2001.

WITNESS my hand and official seal pursuant to the authority vested in me as a Notary Public by the State of Colorado.

*Shannon M. Nation-Kammerer*  
Notary Public  
My Commission Expires: 7-15-2003



My Commission Expires 07/15/2003

07/15/2003

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Assignee: Colorado State University through its agent Colorado State University  
Research Foundation

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**POWER OF ATTORNEY**

I, Dr. Mervyn Jacobson, President, on behalf of the Assignee, XY, Inc., hereby appoint Santangelo Law Offices, P.C., whose mailing address is 125 South Howes, Third Floor, Fort Collins, Colorado 80521, including Luke Santangelo, whose registration number before the United States Patent and Trademark Office is 31,997, Craig R. Miles, whose registration number before the United States Patent Office is 45,954, and Chad C. Soliz, whose registration number before the United States Patent Office is 47,101 as my attorneys/agents to prosecute this application entitled "Equine System for Non-Surgical Artificial Insemination" and to transact all business in the Patent Office connected therewith.

Dated this 11 day of January, 2001.

By: \_\_\_\_\_

Dr. Mervyn Jacobson, President, XY, Inc.

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Assignee: Colorado State University through its agent Colorado State University  
Research Foundation

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**POWER OF ATTORNEY**

I, Arundeeep S. Pradhan, Director of Technology Transfer, on behalf of the Assignee, Colorado State University Research Foundation as agent for Colorado State University, hereby appoint Santangelo Law Offices, P.C., whose mailing address is 125 South Howes, Third Floor, Fort Collins, Colorado 80521, including Luke Santangelo, whose registration number before the United States Patent and Trademark Office is 31,997, Craig R. Miles, whose registration number before the United States Patent Office is 45,954, and Chad C. Soliz, whose registration number before the United States Patent Office is 47,101 as my attorneys/agents to prosecute this application entitled "Equine System for Non-Surgical Artificial Insemination" and to transact all business in the Patent Office connected therewith.

Dated this 11<sup>th</sup> day of January, 2001.

By: \_\_\_\_\_

Arundeeep S. Pradhan

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Assignee: Colorado State University through its agent Colorado State University  
Research Foundation

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**VERIFIED STATEMENT ESTABLISHING SMALL ENTITY STATUS**  
**37 CFR 1.9(e)--UNIVERSITY OR OTHER INSTITUTION OF HIGHER LEARNING**

I hereby declare that I am an official empowered to act on behalf of the University identified below:

Colorado State University  
c/o Colorado State University Research Foundation  
601 South Howes Street, Room 410  
Fort Collins, CO 80523

Type of nonprofit organization: University.

I hereby declare that the nonprofit organization identified above is a University or other Institution of Higher Education and therefore qualifies as a nonprofit organization as defined in 37 CFR 1.9(e) for purposes of paying reduced fees to the United States Patent and Trademark Office regarding the invention described in the specification filed herewith with title as listed above.

I hereby declare, to the best of my knowledge, rights under contract or law have been conveyed to and remain with the nonprofit organization except for an exclusive license which has been granted to XY, Inc.

I hereby declare that no rights to the invention are held by any concern which would not qualify as a small business concern under 37 CFR 1.9(d).


Each person, concern, or organization having any rights in the invention is listed below:

- 1) Colorado State University  
c/o Colorado State University Research Foundation  
P. O. Box 483  
Fort Collins, CO 80523
- 2) XY, Inc.  
1108 North Lemay Avenue  
Fort Collins, CO 80524

I acknowledge the duty to file, in this application, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Made under OATH this 11<sup>th</sup> day of January, 2001.

By:   
Arundeeep S. Pradhan, Director of Technology Transfer  
for Colorado State University Research Foundation  
agent for Colorado State University



UNITED STATES OF AMERICA )  
STATE OF COLORADO ) ss.  
COUNTY OF LARIMER )

SUBSCRIBED AND SWORN to before me in the County of Larimer, State of Colorado, United States of America, by Arundeeep S. Pradhan, this 11 day of January, 2001.

WITNESS my hand and official seal pursuant to the authority vested in me as a Notary Public by the State of Colorado.



My Commission Expires 07/15/2003

Shannon M. Nation-Kammerer  
Notary Public  
My Commission Expires: 7-15-2003

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(PCT) 29 July 1999

Assignee: Colorado State University through its agent Colorado State University  
Research Foundation

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**VERIFIED STATEMENT ESTABLISHING SMALL ENTITY STATUS  
(SMALL BUSINESS CONCERN)**

I, Dr. Mervyn Jacobson as president of XY, Inc., pursuant to 37 C.F.R. Section 1.27(c) state that the following facts are true:

1. I am president of XY, Inc. As such I am empowered to act on behalf of the Assignee.
2. As set forth in 13 C.F.R. Section 121.12, XY, Inc. is an entity whose number of employees, including those of its affiliates, does not exceed 500 persons and which has not assigned, granted, conveyed, or licensed, and is under no obligation under contract or law to assign, grant, convey or license, any rights in the subject matter of the enclosed Patent Application. Exclusive rights to the invention have been conveyed to and remain with XY, Inc. XY, Inc appears to qualify as a small business concern as defined in 37 C.F.R. Section 1.9(d).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

MADE this 11 day of January, 2001.

By: \_\_\_\_\_

Dr. Mervyn Jacobson, President, XY, Inc.

UNITED STATES OF AMERICA )  
STATE OF COLORADO )ss.  
COUNTY OF LARIMER )

SUBSCRIBED AND AFFIRMED OR SWORN to before me in the County of Larimer, State of Colorado, United States of America, by Dr. Mervyn Jacobson, this 11 day of January, 2001.

WITNESS my hand and official seal pursuant to the authority vested in me as a Notary Public by the State of Colorado.

Shannon M. Nation-Kammerer

Notary Public

My Commission Expires: 7-15-2003



My Commission Expires 07/15/2003

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(PCT) 29 July 1999

Assignee: Colorado State University through its agent Colorado State University  
Research Foundation

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**VERIFIED STATEMENT ESTABLISHING SMALL ENTITY STATUS  
(UNIVERSITY EMPLOYEE)**

We, Edward L. Squires, Patrick M. McCue and George E. Seidel, as the above named inventors of the invention described in the specification filed herewith with title as listed above, hereby declare that all actions involving the creation of the above referenced invention were taken by us as an employee who has acted on behalf of Colorado State University a non-profit organization as defined in 37 C.F.R. 1.9(e) for purposes of paying reduced fees to the Patent and Trademark Office.

We have not assigned, granted, conveyed or licensed and are under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who would not qualify as a small business concern under 37 C.F.R. 1.9(d) or a nonprofit organization under 37 C.F.R. 1.9(e).


Each person, concern, or organization to which we have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

Colorado State University  
c/o Colorado State University Research Foundation  
P. O. Box 483  
Fort Collins, CO 80523

We acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate.

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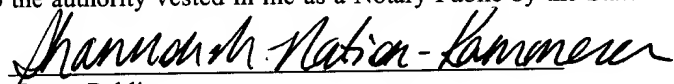
  
Edward L. Squires

UNITED STATES OF AMERICA )  
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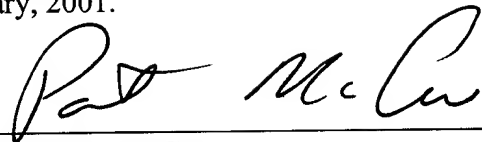
WITNESS my hand and official seal pursuant to the authority vested in me as a Notary Public by the State of Colorado.



  
Notary Public  
My Commission Expires: 7-15-2003

My Commission Expires 07/15/2003

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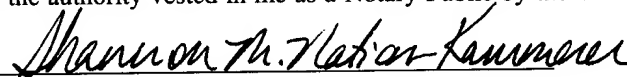
  
Patrick M. McCue

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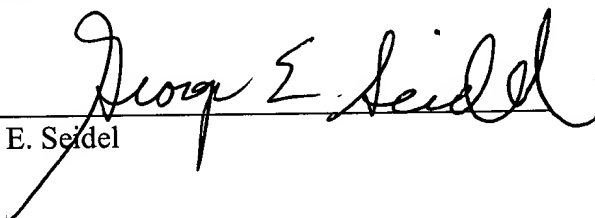
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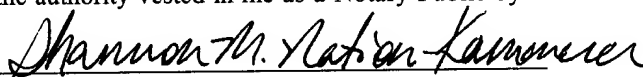
  
George E. Seidel

UNITED STATES OF AMERICA )  
STATE OF COLORADO )ss.  
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